

DEVAL L. PATRICK GOVERNOR TIMOTHY P. MURRAY LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD

SECRETARY JOHN AUERBACH COMMISSIONER

The Commonwealth of Massachusetts

Executive Office of Health and Human Services Department of Public Health William A. Hinton State Laboratory Institute 305 South Street, Jamaica Plain, MA 02130

01/13/2011

Ginger Hsu Assistant District Attorney, Suffolk County

Dear ADA Hsu,

Enclosed is the information you requested in regards to Commonwealth vs. Included are copies of the following:

- 1. Drug Analysis Laboratory Receipt.
- 2. Curriculum Vitae for Annie Dookhan & Kate Corbett
- 3. Control Cards with analytical results for samples #

4. Analysis sheets with chemist's hand notations and test results.

5. GC/Mass Spectral analytical data for samples #

I, Annie Dookhan, was the custodial chemist and performed the preliminary testing and net weight for this sample. Kate Corbett was the confirmatory chemist and analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Sincerely

'Annie Khan (Dookhan)

Chemist II

Drug Analysis Lab

Jamaica Plain, MA. 02130

(617) 983-6631



CC#_ 12

BOOK #	دب نع	TV	
DACE #	3 0		

PRUG RECEIPT	PAGE #	,	
2	DESTRUCTION #		
District/Unit A-1 / S Cul			
Name & Rank of Arresting Officer らん	Im DWAN	ID#100	bs
DEFENDANT'S NAME	ADDRESS	CITY	STATE
		Donell	MA
		MAH-	MA
		LAB US	E ONLY
DESCRIPTION OF ITEMS SUBMITTED	GROSS QUANTITY	GROSS WEIGHT	ANALYSIS NUMBER
MARACK COUTINE	1 P/B	d.dgm.	
CENCK Go Colde	4 P/B'C	576 80	
MARIJUANA	2 P/B"	HAMA belogn	
	V	42 4 K	
· · · · · · · · · · · · · · · · · · ·			

Received by

9 2270 Date

ECU Control #

 $\tilde{\mathcal{S}}: \mathbb{E}_{N}^{1,2}(\overset{\mathcal{S}^{-1}}{\underset{N}{\longrightarrow}}) \wedge \tilde{\mathcal{S}}_{1}$

Curriculum Vitae

Annie Khan (Dookhan)

Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry. University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

Experience:

2003 - present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- *Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- *Appointed Assistant Analyst by Assistant Commissioner of Public Health, January 2004.
- *Responsible for the identification of drugs to determine violations of harmful and narcotic drug laws.
- *Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- *Maintenance and repairs of all analytical instruments.
- *Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.
- * Responsible for the Quality Control/Quality Assurance program for the drug lab.
- *Notary Public.
- *Oualified as an expert witness in Massachusetts Courts and U.S. District Court

2001 - 2003

OC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- *Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.
- *Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.
- *Writing, revising and reviewing Standard Operating Procedures (SOPs).
- *Routine QC testing of products for the FDA.
- *Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- *Calibration, preventive maintenance, QC and QA of analytical instrumentation.
- *Complete testing of chemicals for Vendor Validation Project for the FDA.
- *Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

Additional Training:

Dept. of Justice - Forensics Professionals.

GLP/GMP course with Massachusetts Biologic Laboratory.

OC/QA training according to FDA Codes and Regulations.

GC and GC/MS courses with Agilent Technologies and Restek.

HPLC course with Waters Cooperation.

FTIR course with Spectros.

TOC training with MBL and Sievers.

Association:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

Curriculum Vitae

Kate A. Corbett

Education

Bachelor of Science Degree, CHEMISTRY May 2003 MERRIMACK COLLEGE

Coursework included: Organic Chemistry, Inorganic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus

Employment

Chemist II State Laboratory Institute (March 2008-Present)

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substance and trafficking substances to determine violation of the Massachusetts drug laws
- Responsible for the identification of pharmaceuticals to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation, microscopes and balances for forensic drug analysis

Chemist I State Laboratory Institute (2005-March 2008)

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substance to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation for the purpose of performing forensic drug analysis
- Successfully completed an eight week training course in the analysis of drugs conducted by senior staff of the Department of Public Health, Drug Analysis Laboratory
- Appointed an assistant analyst for the Department of Public Health, Drug Analysis Laboratory in 2005.

Research Associate (September 2003 – August 2005)

SENSOR TECHNOLOGIES, INC - Shrewsbury, MA

- Prepared chemistries used in making sensor beads
- Generated and examined sensors employing fluorescence spectroscopy
- > Performed protein, dye and sugar assays using UV/VIS spectrophotometry
- > Carried out titrations on ricin using fluorescence correlation spectroscopy
- > Statistical analysis of experimental data

Intern (March 2003 – August 2003)

MASSACHUSETTS STATE POLICE CRIME LABORATORY - Sudbury, MA

- Assisted in the gathering of case files to fulfill the National Institute of Justice's No Suspect Backlog Reduction Grant
- Observed in the Evidence, Criminalistics, DNA, Drug, Trace, Toxicology, and Bomb/Arson Units

•	Boston D.C.U. Pol P.O. MILA DEPINA	Date Analyzed: \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Amount:		Subst: SUB
No. Cont:	1 Cont: pb	
Date Rec'd: 0	9/22/2010	No. Analyzed:
Gross Wt.:	2.20	Net Weight: D - \\
Prelim: Q	ocaine ©	# Tests: 5 PSD () Findings:
Officer:	Boston D.C.U. Po P.O. MILA DEPINA	Date Analyzed: (\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Def:	4:0	Syb
Amount: No. Cont:	14 Cont. pb	Subst: TAB
Date Rec'd: Gross Wt.:		No. Analyzed: ヽ Net Weight: ⁰ -0의
G1055 VVI	5.00	# Tests: 6 ASO
		# Tests. ZCA
Prelim:	cocane(ic)	Findings:
		•
No		Data Aughung 1 15175 17
No.	Boston D.C.U. P	Date Analyzed: 11-17-10
	P.O. MILA DEPINA	опсе Берг.
Def:		
Amount:		Subst: VM
No. Cont:	2 Cont: pb	
Date Rec'd:	09/22/2010	No. Analyzed: \
Gross Wt.:	6.60	Net Weight:
		#Tests: 3 ASD MUOD MUUOD DUG-ID

Findings:

Prelim:

GMM89) D111910-5

GC/M(Q10.5)

9,055m+ 206 = 1.8

DRUG POWDER ANALYSIS FORM

SAMPLE#	AGENCY 20	SHED ANALYST DOT
No. of samples tested:	_	Evidence Wt.
PHYSICAL DESCRIPTION:		Gross Wt (): 0.1791
off while thur	114 suistance	Gross Wt ():
10 1		Pkg. Wt:
		Net Wt: 0.1139
PRELIMINARY TESTS Spot Tests Cobalt		Microcrystalline Tests Gold
Thiocyanate () +	-	Chloride +
Marquis	•	TLTA (_) +
Froehde's	-	OTHER TESTS
Mecke's	<u>.</u>	
PRELIMINARY TEST RESULTS		GC/MS CONFIRMATORY TEST
RESULTS <u>co carie</u>		RESULTS COccure
DATE 11-10		MS OPERATOR ICAC
		DATE N-22-1-3

Revised 7/2005

DRUG POWDER ANALYSIS FORM

SAMPLE # No. of samples tested:		BOERN		<i>4</i> 22
No. or admition residu.			TAIGGIIGE 41C	
PHYSICAL DESCRIPTION:			Gross Wt (╰┤):_	0.7606
of white or	win e	4884CV CO	Gross Wt ():_	0.1693
	c1 602			
•	•			0.0962
			1400 440.	
				·
PRELIMINARY TESTS Spot Tests		<u>.</u>	licrocrystalline Tes	ts
Cobalt			3old	
Thiocyanate (-) +	-	Chlo	uiqe <u>+</u>	
Marquis		TI	TA <u>(_)</u> +	•
Froehde's	-		OTHER TESTS	
Mecke's				
	_			
				
PRELIMINARY TEST RESULTS		GC/M	S CONFIRMATORY	TEST :
RESULTS OCCUR	_	RESU	LTS (occur <i>i</i>	<u>. </u>
DATE 11-17-10	_		AS	
	-		OR LEAC	MANAGE -
		DA	TE	10

Revised 7/2005

YKM (

Information from Data File:

File Name : G:\11_19_10\756204.D

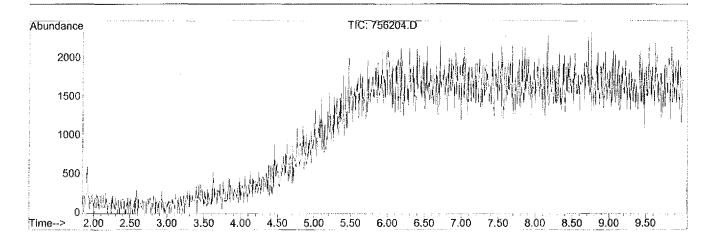
Operator : ASD/\overline{KAC}

Date Acquired : 19 Nov 2010 13:35

Sample Name : BLANK

Submitted by

Vial Number : 1 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

NO INTEGRATED PEAKS

Information from Data File:

File Name : G:\11_19_10\756205.D

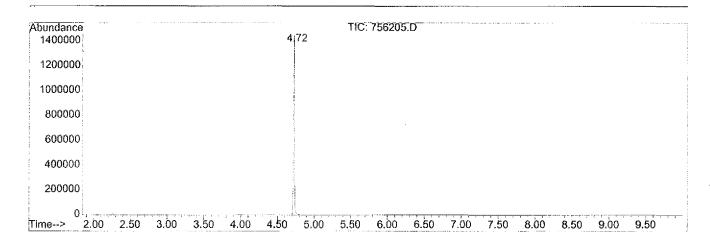
Operator : ASD/KAC

Date Acquired : 19 Nov 2010 13:48

Sample Name : COCAINE STD

Submitted by :

Vial Number : 5
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.721	1367268	100.00	100.00

: G:\11_19_10\756205.D File Name

Operator : ASD/KAC

: 19 Nov 2010 Date Acquired 13:48

Sample Name COCAINE STD

Submitted by

PK#

Vial Number 5 AcquisitionMeth: DRUGS Integrator : RTE

RT

Search Libraries: C:\DATABASE\SLI.L

Library/ID

Minimum Quality: 90

CAS#

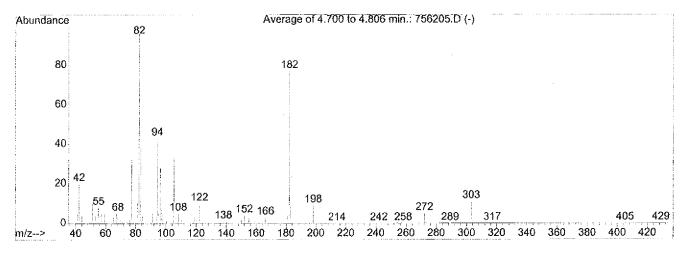
Qual

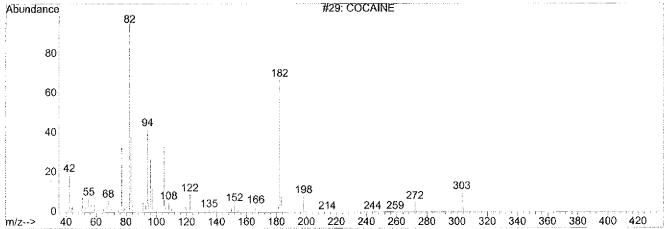
C:\DATABASE\PMW TOX2.L

Minimum Quality: 90 C:\DATABASE\NIST98.L

4.72 C:\DATABASE\SLI.L 1

COCAINE 000050-36-2 99





756205.D

Thu Jan 06 10:54:28 2011

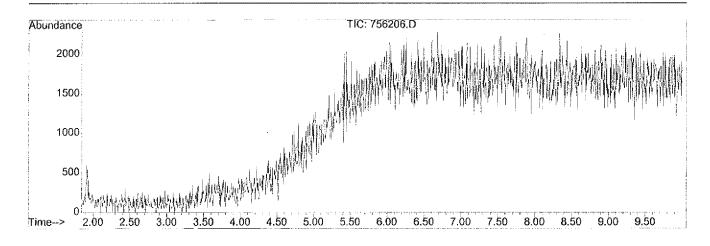
Information from Data File:

File Name : G:\11_19_10\756206.D

Operator : ASD/KAC

Date Acquired : 19 Nov 2010 14:02

Sample Name : BLANK Submitted by : ASD Vial Number : 1 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

NO INTEGRATED PEAKS

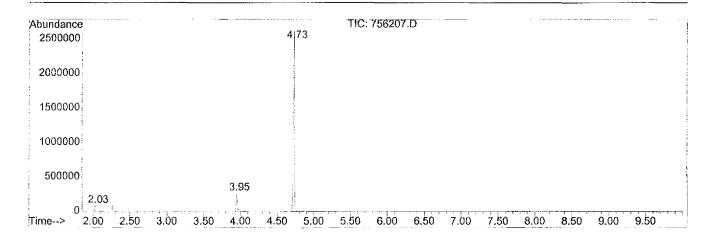
File Name : G:\11_19_10\756207.D

Operator : ASD/KAC

Date Acquired : 19 Nov 2010 14:16

Sample Name :

Submitted by : ASD
Vial Number : 7
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
2.026	126390	3.89	4.47	
3.946	300461	9.24	10.63	
4.729	2825306	86.87	100.00	

File Name : $G: 11_{19}_{10}, 756207.D$

Operator : ASD/KAC

Date Acquired : 19 Nov 2010 14:16

Sample Name :

Submitted by : ASD
Vial Number : 7
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

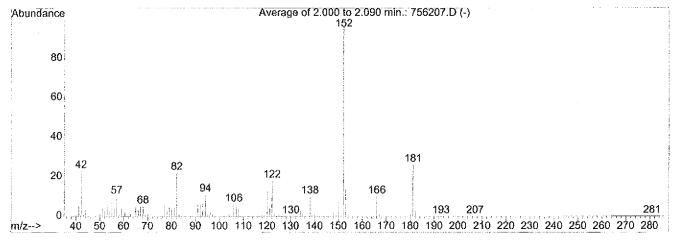
Minimum Quality: 90

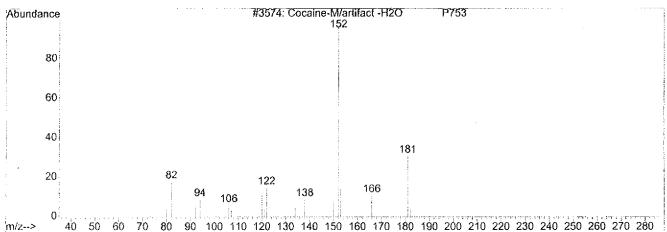
C:\DATABASE\PMW TOX2.L

Minimum Quality: 90

C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
1	2.03	C:\DATABASE\PMW_TOX2.L Cocaine-M/artifact -H2O Metipranolol-M/artifact AC MDA-M (desmethylenyl-methyl-) ME	000000-00-0 000000-00-0 @ 00000-00-0	98 38 25





756207.D

Thu Jan 06 10:54:37 2011

File Name : G:\11 19 10\756207.D

Operator : ASD/KAC

Date Acquired : 19 Nov 2010 14:16

Sample Name :

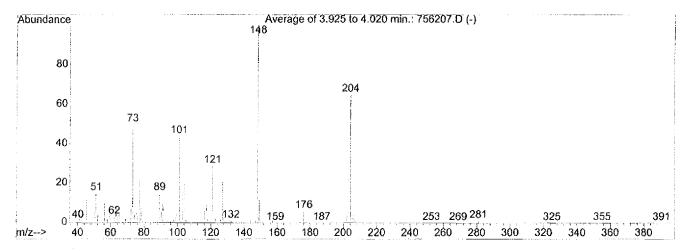
Submitted by : ASD
Vial Number : 7
AcquisitionMeth: DRUGS
Integrator : RTE

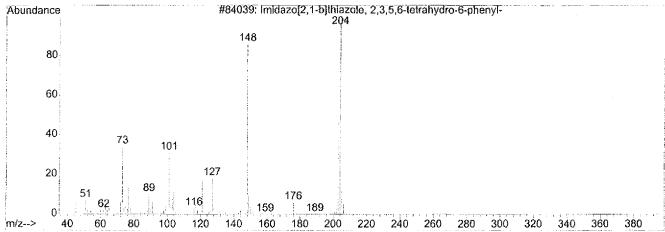
Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90

C:\DATABASE\PMW_TOX2.L Minimum Quality: 90

C:\DATABASE\NIST98.L

PK#	RT	Library/ID		CAS#	Qual
 2	3.95	C:\DATABASE\NIST98.L	-		
		Imidazo[2,1-b]thiazole,	2,3,5,6-tet	006649-23-6	99
		<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	006649-23-6	98
		<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	006649-23-6	97





756207.D

Thu Jan 06 10:54:38 2011

File Name : G:\11_19_10\756207.D

Operator : ASD/KAC

Date Acquired : 19 Nov 2010 14:16

Sample Name

Submitted by : ASD
Vial Number : 7
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

Minimum Quality: 90

C:\DATABASE\PMW_TOX2.L

Minimum Quality: 90

C:\DATABASE\NIST98.L

PK# RT Library/ID CAS#

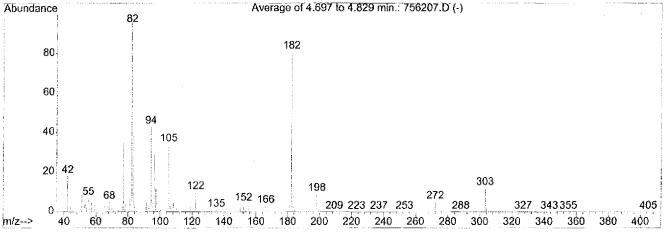
Qual

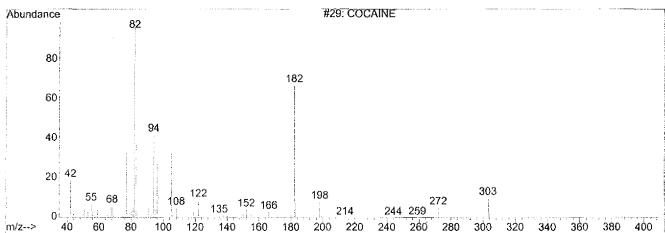
3 4.73 C:\DATABASE\SLI.L

COCAINE

000050-36-2

99





756207.D

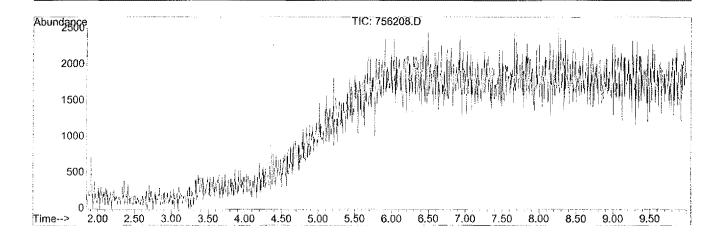
Thu Jan 06 10:54:39 2011

File Name : $G: 11_{19_{10}} 756208.D$

Operator : $ASD/K\overline{A}C$

Date Acquired : 19 Nov 2010 14:29

Sample Name : BLANK Submitted by : ASD Vial Number : 1 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

NO INTEGRATED PEAKS

Information from Data File:

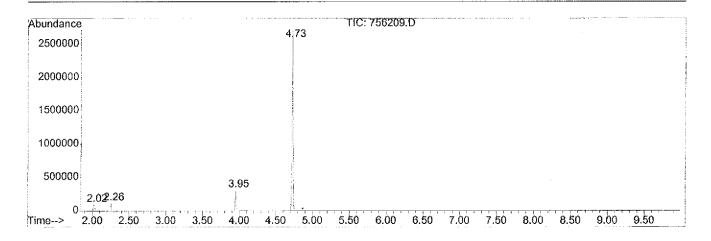
File Name : G:\11_19_10\756209.D

Operator : ASD/KAC

Date Acquired : 19 Nov 2010 14:42

Sample Name :

Submitted by : ASD
Vial Number : 9
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
2.024	152576	4.53	5.47	
2.257 3.949	104184 322196	3.09 9.56	3.73 11.55	
4.727	2790744	82.82	100.00	

File Name : G:\11 19 10\756209.D

Operator : ASD/KAC

Date Acquired : 19 Nov 2010 14:42

Sample Name :

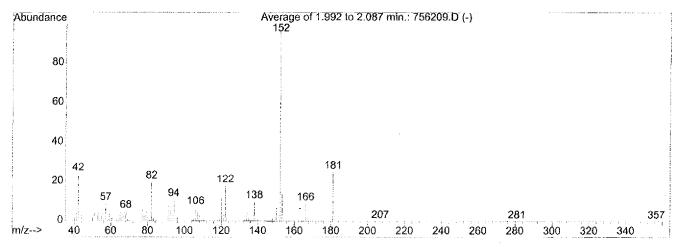
Submitted by : ASD
Vial Number : 9
AcquisitionMeth: DRUGS
Integrator : RTE

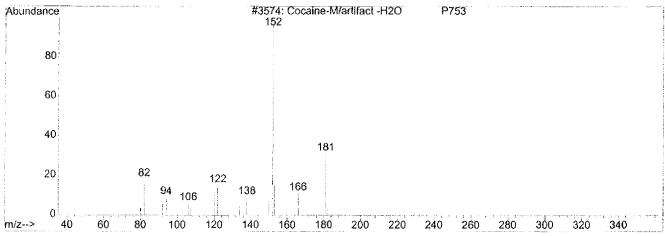
Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90

C:\DATABASE\PMW_TOX2.L Minimum Quality: 90

C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
1	2.02	C:\DATABASE\PMW_TOX2.L Cocaine-M/artifact -H2O Vanillin AC	00000-00-0 00000-00-0	97 32
		Metipranolol-M/artifact AC	00000-00-0	23





756209.D

Thu Jan 06 10:54:47 2011

File Name : G:\11 19 10\756209.D

Operator : ASD/KAC

Date Acquired : 19 Nov 2010 14:42

Sample Name :

Submitted by : ASD
Vial Number : 9
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

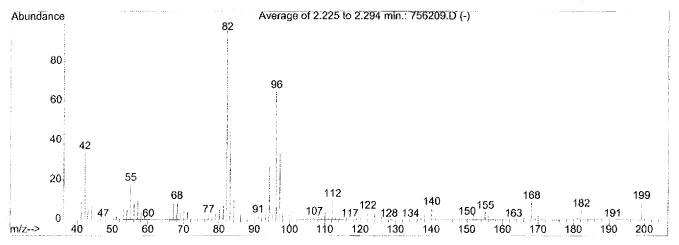
Minimum Quality: 90

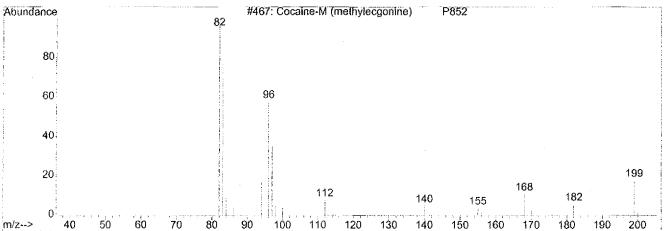
C:\DATABASE\PMW TOX2.L

Minimum Quality: 90

C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
2	2.26	C:\DATABASE\PMW_TOX2.L		
		Cocaine-M (methylecgonine)	007143-09-1	95
		Cocaine-M (methylecgonine) AC	000000-00-0	59
		Lobeline artifact	000000-00-0	9





756209.D

Thu Jan 06 10:54:48 2011

Page 3

File Name : G:\11_19_10\756209.D

Operator : ASD/KAC

Date Acquired : 19 Nov 2010 14:42

Sample Name :

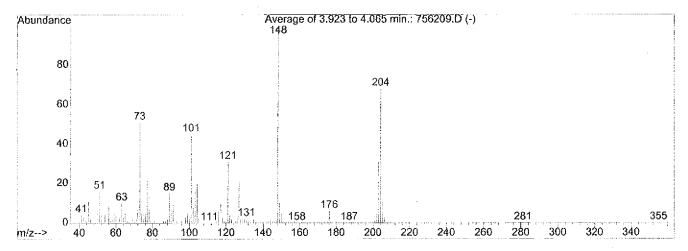
Submitted by : ASD
Vial Number : 9
AcquisitionMeth: DRUGS
Integrator : RTE

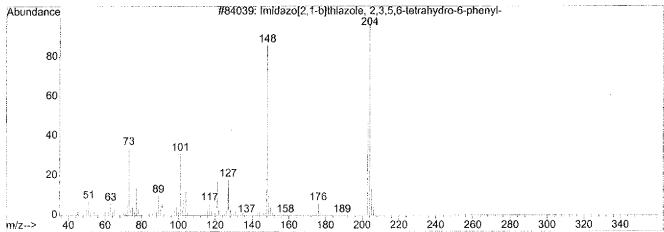
Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90

C:\DATABASE\PMW TOX2.L Minimum Quality: 90

C:\DATABASE\NIST98.L

PK#	RT	Library/ID		CAS#	Qual
 3	3.95	C:\DATABASE\NIST98.L			
		<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	006649-23-6	98
		<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	006649-23-6	98
		<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	006649-23-6	97





756209.D

Thu Jan 06 10:54:49 2011

File Name : G:\11_19_10\756209.D

Operator : ASD/KAC

Date Acquired : 19 Nov 2010

Sample Name

Submitted by ASD Vial Number AcquisitionMeth: DRUGS Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

Minimum Quality: 90 Minimum Quality: 90

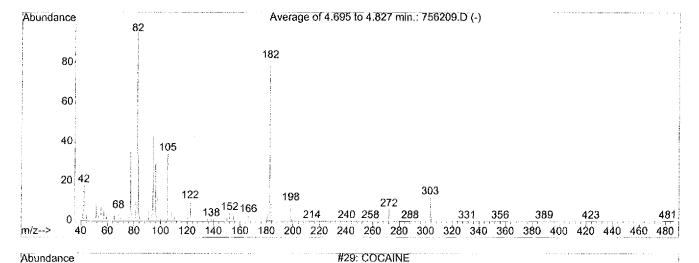
C:\DATABASE\PMW TOX2.L

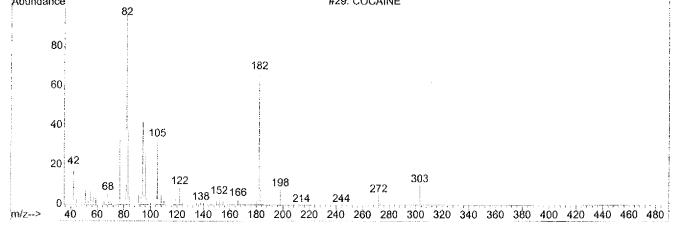
C:\DATABASE\NIST98.L

PK# RT Library/ID CAS# Qual

4.73 C:\DATABASE\SLI.L COCAINE

000050-36-2 99





756209.D

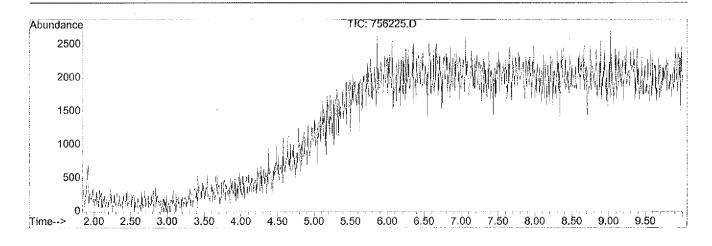
Thu Jan 06 10:54:49 2011

File Name : G:\11_19_10\756225.D

Operator : ASD/KAC

Date Acquired : 19 Nov 2010 18:18

Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time Area Area % Ratio %

NO INTEGRATED PEAKS

Information from Data File:

File Name : G:\11_19_10\756226.D

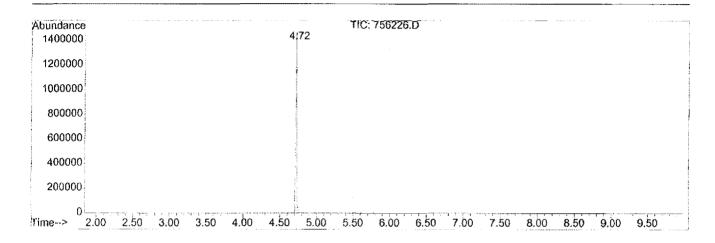
Operator : ASD/KAC

: ASD/KAC Operator

Date Acquired : 19 Nov 2010 18:32

Sample Name : COCAINE STD

: ASD Submitted by Vial Number 26 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.721	1424344	100.00	100.00

File Name : G:\11 19 10\756226.D

Operator : ASD/KAC

Date Acquired : 19 Nov 2010 18:32

Sample Name : COCAINE STD

Submitted by : ASD Vial Number : 26 AcquisitionMeth: DRUGS Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

Minimum Quality: 90

C:\DATABASE\PMW_TOX2.L

Minimum Quality: 90

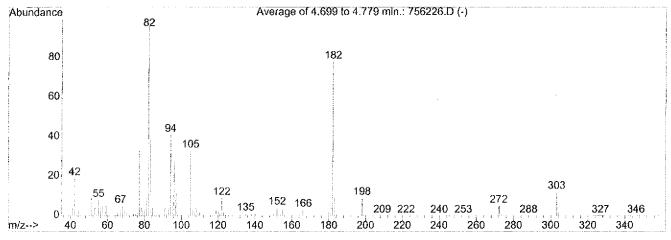
99

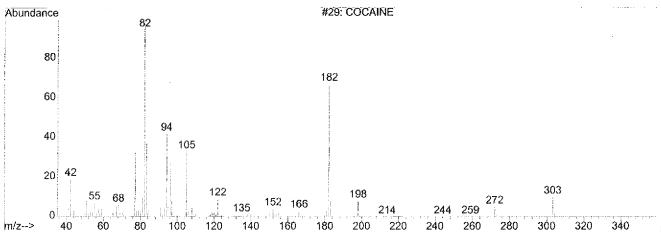
C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
_				

1 4.72 C:\DATABASE\SLI.L

COCAINE 000050-36-2





756226.D

Thu Jan 06 10:55:05 2011